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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,556	01/11/2002	Roy Frank Brabson	RSW920010159US1	1822

7590 08/08/2006
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Research Triangle Park, NC 27709

EXAMINER

CHANKONG, DOHM

ART UNIT	PAPER NUMBER
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2152

DATE MAILED: 08/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/045,556

Applicant(s)

BRABSON ET AL.

Examiner

Dohm Chankong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 and 23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 and 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- 1> This action is in response to Applicant's Appeal Brief, filed 6.23.2006. Claims 1-21 and 23 are presented for further examination.
- 2> This is a non-final rejection.

Response to Arguments

- 3> In view of the Appeal Brief filed on 6.23.2006, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below for claims 16-21.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4> Claims 1-7, 9-12, 17-21 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Buhrke et al. (US 5,280,470) ["Buhrke"].

5> In regards to claim 1 and 23, Buhrke discloses a method of improving traffic management in a network, comprising steps of:

- a. detecting a changed environmental condition (e.g. virtual channel request- col. 5 ll. 1-3, establishment of virtual channel, col. 5 ll. 34, rate of active cells- col. 5 ll. 35);
- b. generating notification of the detected condition (e.g. message with number of channels – col. 5 ll. 11-12, load reduction request- col. 5 ll. 37, column 6 «lines 21-26»)
- c. analyzing the generated notification by consulting one or more criteria (e.g. analyses whether value of N_1/N_2 is acceptable- col. 5 ll. 20-21, analyzes load reduction request -col. 5 ll. 35)
- d. determining, at a currently executing application, based on the analysis, whether the currently executing application should modify a behavior of the currently-execution application (e.g. determining whether to accept or reject number

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of channels col. 5 ll. 20-24, determining whether to increase or decrease a factor col. 5 ll. 44-46)

6> In regards to claim 2, Buhrke discloses the method according to claim 1, further comprising the step of modifying, by the currently-executing application, the behavior of the currently executing application (e.g. modifying the request levels col. 5 ll. 20-24, reducing or increasing the factor col. 5 ll. 44-46, column 6 «lines 21-26» - reducing bandwidth)

7> In regards to claim 3, Buhrke discloses the method according to claim 2, wherein the modification comprises reducing the size of one of more data objects generated by the currently executing application [e.g. reduce rate of cells, lower bucket, reduce bandwidth virtual channel col. 5 ll. 35-400, col. 611-20 & column 4 «lines 17-19»].

8> In regards to claim 4, Buhrke discloses the method according to claim 2 wherein the modification comprises reducing data retrieval by the currently-executing application (e.g. decreasing the N2 factor col. 5 ll. 46-47)

9> In regards to claim 5, Buhrke discloses the method according to claim 2, wherein the modification comprises dropping one or more connections with the currently executing application (e.g. disconnection of a virtual channel, col. 6 ll. 33-49)

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10> In regards to claim 6, Buhrke discloses the method according to claim 2, wherein the modification comprises increasing a sized of one of more data objects generated by the currently-executing application (e.g. increasing the number of virtual channels, hence increasing the load col. 6 ll. 2-8).

11> In regards to claim 7, Buhrke discloses the method according to claim 2, wherein the modification comprises increasing data retrieval by currently-executing application (e.g. increasing the N₁ Factor col. 5 ll. 44-47).

12> In regards to claim 9, Buhrke discloses the method according to claim 2, wherein the modification comprises changing the currently-executing applications use of one or more other applications (e.g. execution of a slow down process col. 6 ll. 55-60).

13> In regards to claim 10, Buhrke discloses the method of claim 1, wherein the changed environmental condition (e.g. virtual channel exceeds rate-col. 6 ll. 34-35) pertains to system-related conditions (e.g. switch detection of excess rate col. 6 ll. 33-40).

14> In regards to claim 11, Buhrke discloses the method of claim 1, wherein the changed environmental condition pertains to network related conditions (e.g. detecting load on the network col. 5, lines 34-47).

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15> In regards to claim 12, Buhrke discloses the method of claim 1, wherein environmental condition (e.g. pertains to client related conditions in one or more clients (terminal, switch) of the currently executing application (col. 5, lines 34-47).

16> In regards to claim 17, Buhrke discloses the method of claim 1, wherein the changed environmental condition occurred externally to a system in which the currently-executing application is executing [column 6 «lines 31-48»].

17> In regards to claims 18-21, Buhrke discloses the method of claim 17, wherein:
the generated notification pertains to a condition of a client of the currently executing application [column 6 «lines 8-27»], to a condition of a remote network platform [Figure 1 «item 4» | Figure 4 «item 400» : switch overloaded?], or to a condition of a remote server with which the currently executing application is communicating [Figure 1 «item 4» | Figure 4 «item 400» : switch is interpreted as a remote server].

Buhrke also discloses making adjustments pertaining to the remote server [Figure 2 «item 216» | Figure 3 «item 310»].

18> Claims 1 and 13-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamato et al (US 5,835,484) [“Yamato”].

19> In regards to claim 1, Yamato discloses a method of improving traffic management in a network, comprising steps of:

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- a. detecting a changed environmental condition (e.g. detecting violations in environment, congestion state col. 6 ll. 30-35, col. 6 ll. 45-55, col. 12 ll. 15) ;
- b. generating notification of the detected condition (e.g. notify of violation col. 12 ll. 17-19, col. 12 ll. 59-60)
- c. analyzing the generated notification by consulting one or more criteria (analyzing and consulting monitoring parameters, col. 12 ll. 1. 33-39)
- d. determining, at a currently executing application, based on the analysis, whether the currently executing application should modify a behavior of the currently-execution application (e.g. determination to modify application monitoring parameters col. 12 ll. 34-40).

Yamato's cell traffic regulation unit is interpreted as a currently executing application. The unit may change its monitoring parameter in response to network conditions.

20> In regards to claim 13, Yamato discloses the method according to claim 1. Burke is silent on herein the changed environmental condition occurred internally in to a system in which the currently executing application is executing (col. 7 ll. 40-45, system of fig 1).

21> In regards to claim 14, Yamato discloses the method according to claim 13 wherein the generated notification pertains to a condition of a local network protocol stack (condition indicator within a payload field of a header-31 where the indicator is used to determine

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existence of condition; if condition exists a notification is sent col. 7 ll. 20-39, col. 8 ll. 10-15,abs).

22> In regards to claim 15, Yamato discloses the method according to claim 13, wherein the generated notification pertains to a condition of the system in which the currently executing (execution of a program for monitoring connection-121, col. 5 ll. 53-60) application is executing.

23> In regards to claim 16, Yamato discloses the method of claim 13, wherein the analyzing step is performed by a policy manager component of the system in which the currently-executing application is executing [Figure 1 «item 203»].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

24> Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buhrke et. al. (US 5,280,470) in view of Nahidipour et al. (US 5,983,723)

25> In regards to claim 8 Buhrke discloses the method according to claim 2.

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Buhrke is silent on wherein modification comprises changing thread assignments of the currently executing application

Nahidipour et al. discloses changing thread assignments (e.g. reducing threads) of a currently executing application in order to ensures improved data transfer efficiency, lower utilization of system resources, and memory (col. 5 ll. 45-56.).

It would be obvious to one of ordinary skill in the art at the time of the invention to modify Buhrke by changing thread assignments (e.g. reducing threads) of a currently executing application, as taught by Nahidipour et al. in order to ensures improved data transfer efficiency, lower utilization of system resources, and memory as number of threads for system calls is reduced (col. 5 ll. 45-56. col. 8 ll. 37-43).

Conclusion

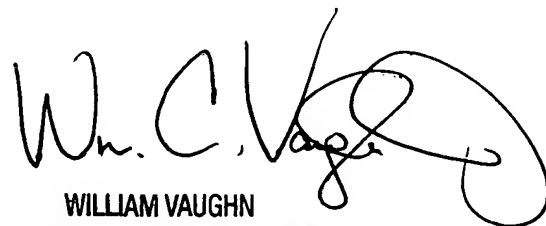
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dohm Chankong whose telephone number is 571.272.3942. The examiner can normally be reached on Monday-Thursday [7:30 AM to 4:30 PM].

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571.272.3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DC \

A handwritten signature in black ink, appearing to read "Wm. C. Vaughn", with a large, stylized flourish at the end.

WILLIAM VAUGHN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100